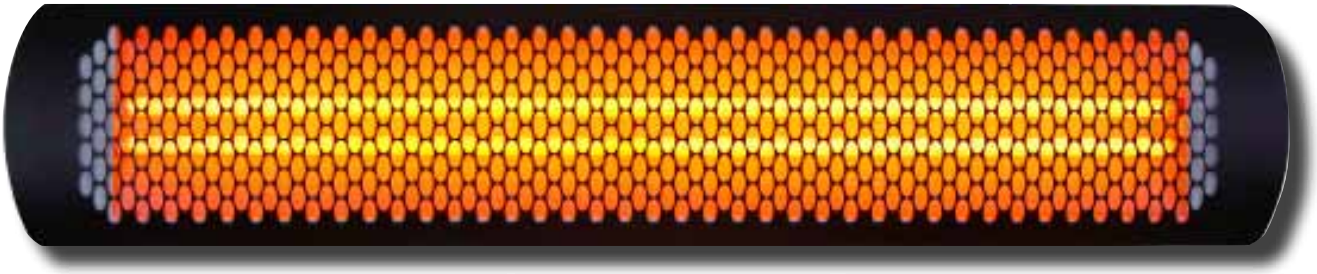
BROMIC HEATING

TUNGSTEN SMART-HEAT™
ELECTRIC HEATER
BY BROMIC

INSTALLATION, INSTRUCTION AND SERVICE MANUAL

SUITABLE FOR ELECTRIC HEATER MODELS: TUNGSTEN 2000W, 3000W, 4000W- AND TUNGSTEN 6000W



⚠ IMPORTANT

READ THIS MANUAL CAREFULLY. SEE INSIDE COVER FOR IMPORTANT INFORMATION ABOUT THIS MANUAL.KEEP INSTRUCTION WITH APPLIANCE FOR FUTURE REFERENCE.

Version 1.0 AUS

IMPORTANT

This manual contains important information about the installation, operation, and maintenance of Tungsten Smart-Heat™ Electric Heaters. Please pay close attention to the important safety information shown throughout this instruction manual. Any safety information will be accompanied by the following safety alert symbols:

⚠DANGER, ⚠WARNING, ⚠IMPORTANT

- READ THIS MANUAL CAREFULLY before installing or servicing this product.
- Improper installation, operation, or maintenance can result in death, severe injury, or property damage.
- This appliance is intended for fixed Installation with 240Volt power supply.
- Installation MUST be carried out by a licensed and authorised technician in accordance with local electrical codes.

BROMIC HEATING

BROMIC HEATING

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Note: Bromic Heating reserves the right to make changes to specifications, parts, components and equipment without prior notification. This Installation, operation and service manual may not be reproduced in any form with prior written consent from Bromic Heating.

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IMPORTANT NOTES AND WARNINGS

⚠ WARNING

- Read all instructions before installing or using this heater
- Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.
- Improper installation, adjustment, or alteration and failure to follow the warnings and instructions in this manual could result in severe personal injury, death or property damage.
- The manufacturer is not responsible for any damage that could happen from improper use. The manufacturer emphasises that this appliance should be used in a responsible manner and that all procedures, warnings, and safety instructions contained in this booklet be followed strictly.
- This heater is not intended for use in bathrooms, laundry areas and similar indoor locations. Never locate heater where it may fall into a bathtub or other water container.
- Do not install the heater directly near a bathtub, shower or swimming pool. Any switches or controls must not be within reach of a person in the bathtub, shower or swimming pool.
- This heater is hot when in use. To avoid burns do not let bare skin touch hot surfaces. Keep combustible materials such as furniture, pillows, bedding, papers, clothes , etc. and curtains at least 1 metre from the front the front of the heater and keep them away from the sides and rear.
- Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Keep packaging materials out of reach of children
- Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns, clothing ignition, or other serious personal injury
- Children should be carefully supervised when they are in the area of the heater.
- Do not attempt to alter the unit in any manner.
- Do not paint any surface of the heater.
- Do not touch the heater with wet hands at any time.
- Do not insert or allow foreign objects to enter front cover or front opening as this may cause an electric shock or fire, or damage the heater
- Do not touch the heating surface at any time, even when the heater is turned off and has cooled down.
- Do not use or store flammable materials near this appliance
- Do not spray aerosols or flammable materials in the vicinity of this appliance while it is in operation
- Never operate the heater in an explosive environment such as areas where petrol or other flammable liquids or vapours are stored.
- Clothing or other flammable materials should not be hung from the heater or placed on or near the heater.

INSTALLATION

- IMPORTANT - Installation must be carried out by a licensed and authorised person.
- The installer is to ensure that the requirements of the local authority, local electrical installation code, municipal building codes, and any other relevant statutory regulations are carried out.
- After unpacking, make sure the appliance shows no signs of visible damage or tampering. If the appliance appears damaged, contact the place of purchase for assistance.
- Remove transit protection before use.
- This appliance must only be used on a 240 Volt AC Single Phase electricity supply.
- This radiant heater is NOT intended to be installed on recreational vehicles and/or boats.
- Do not run cord under carpeting. Do not cover with throw rugs, runners or the like arrange cord away from traffic area and where it will not be tripped over
- A heater has hot and arcing or sparking parts inside. Do not use it in areas where gasoline, paint or flammable liquids are used or stored.
- To maintain Ingress Protection Rating (IPX4), only IPX4 rated conduit fittings should be used for electrical installation.
- Warning –To Reduce the risk of fire with Danger –To Avoid Fire
- This warning tag shall be permanently affixed to the power supply cord, no more than 152mm from the attachment plug and the permanence of the warning tag shall be determined in accordance with Test for Permanence of Cord Tag Section:53
- This Installation, Operation and Service manual should not be removed from the site of installation. Installer should leave manual with the customer for future reference.
- Any guard or other protective device removed for servicing (conducted by an authorised person) must be replaced before operating the heater.
- Heaters are not intended to be installed in wardrobes.
- The appliance must not be located directly below or in front of a wall electricity socket. This is because the heat radiated from the appliance may damage the electricity outlet or plug.
- If the appliance has not been used, or will not be used, for a long period of time, disconnect power supply
- A means for all-pole disconnection of the heater must be incorporated in the fixed wiring according to the local electrical codes.
- Do not mount the heater vertically. Install Heater so that the infrared elements are horizontal. Failure to do this may cause the heating element within the tube to sag and cause premature burnout. Installing vertically will void the manufacturer's warranty.

CLEARANCE

- Do not place articles on or against this appliance
- A minimum safety distance of 1000mm should always be left in front of the appliance.
- This unit must be mounted at a minimum of 1800 mm above the floor.
- Be sure the heater is not facing the ceiling or flammable or combustible substances/materials.

IMPORTANT NOTES AND WARNINGS CONTINUES ...

MAINTENANCE/ REPAIR

- Installation and repair must be carried out by a qualified & licenced service person only. The heater should be inspected before use and at least annually serviced & inspected by a qualified & licenced service person.
- Do not perform maintenance until heater has been turned off, power disconnected, and heater temperature has cooled to room temperature.
- Check for damage to the appliance regularly. If damage to the appliance is suspected, discontinue use immediately and contact the supplier or qualified person to repair.
- At the end of this product's useful life, it must not be disposed of as domestic waste, but must be taken to a collection centre for waste electrical and electronic equipment. It is the user's responsibility to dispose of this appliance through the appropriate channels at the end of its useful life. Failure to do so may incur the penalties established by laws governing waste disposal. Proper differential collection, and the subsequent recycling, processing and environmentally compatible disposal of waste equipment avoids unnecessary damage to the environment and possible related health risks, and also promotes recycling of the materials used in the appliance. For further information on waste collection and disposal, contact your local waste disposal service, or the place of purchase

PRODUCT OVERVIEW

SPECIFICATIONS

Model	2000W	3000W	4000W	6000W
Part no.	2620212	2620213	2620214	2620215
No. of Elements	Single element	Single element	Double element	Double element
Bracket Length	164mm	164mm	244mm	244mm
Heat Output (Watts)	2000W	3000W	4000W	6000W
Approximate area heated (m^2) (Mounting height of 2400mm)	up to $6m^2$	up to $9m^2$	up to $11m^2$	up to $13m^2$
Power connection required (Volts/Amps)	240 V / 8.3 A	240 V / 12.5 A	240 V / 16.6 A	240 V / 25 A
Dimension (WxDxHmm)	1117 x 214 x 86mm	1410 x 214 x 86mm	1117 x 214 x 86mm	1410 x 214 x 86mm
Weight (kg)	9kg	10kg	9kg	10kg
Finish	Black High Temperature Coating			

PRODUCT FEATURES

- The Tungsten Smart-Heat Electric heaters are designed to provide efficient spot heating for commercial and residential applications.
- Suitable for indoor and outdoor heating applications such as restaurants, cafes, bars and clubs, factories, office spaces, designated smoking areas, public areas, hotels and more.
- The heaters are available in 2000W, 3000W, 4000W and 6000W models to suit a range of environments.
- High temperature corrosion-resistant coating.
- IPX4 water ingress protection rating.
- Soft glow infrared heating element - No harsh glare.
- Wall and ceiling mounting brackets allowing adjustable angle of the heating direction.
- Tube elements are included with the heater and easily installed.
- Heater is equipped with spectral reflector for excellent radiant heat output.

HEATER INSTALLATION

WARNING

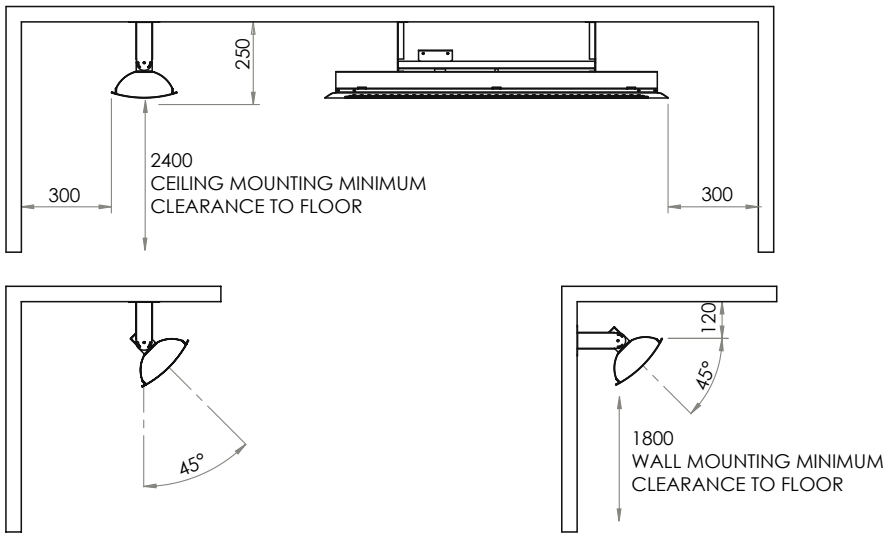
DO NOT MOUNT THE HEATER VERTICALLY!
Heater MUST be installed so that the tube elements are horizontal. Failure to do this will cause the heating element within the tube to sag and cause premature burnout. Installing vertically will void the manufacturers warranty.

WARNING

DO NOT MOUNT THE HEATER VERTICALLY!
For outdoor installation heater must be mounted with face of heater angled down.
For longest product life & to maintain product appearance mount heater under cover & protect from rain & weather whenever possible.

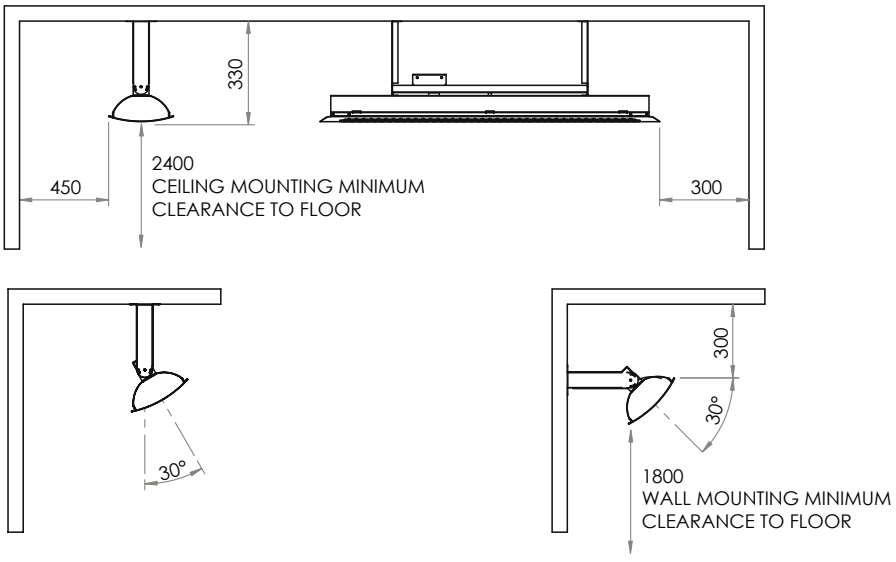
INSTALLATION CLEARANCES
FOR 2000W & 3000W MODELS

2000W & 3000w models must be installed with the minimum installation clearances shown in below diagrams. 2000W & 3000W models are supplied with short mounting brackets to be used for both ceiling & wall mounting.



INSTALLATION CLEARANCES
FOR 4000W & 6000W MODELS

4000W & 6000W models must be installed with the minimum installation clearances shown in below diagrams. 4000W & 6000W models are supplied with long mounting brackets to be used for both ceiling & wall mounting.
Alternatively, short mounting brackets can be used for wall mounting of the 4000W & 6000W models to position the heater closer to the wall. Short mounting brackets must be purchased separately.

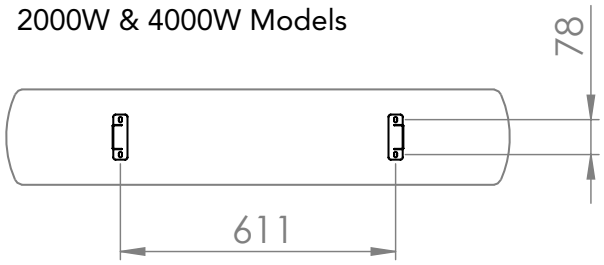


CEILING & WALL MOUNTING

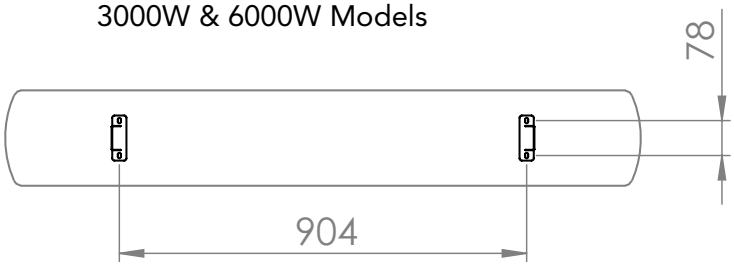
1. Mark mounting hole centres on ceiling or wall.

① Mounting Hole Centres & Heater Position

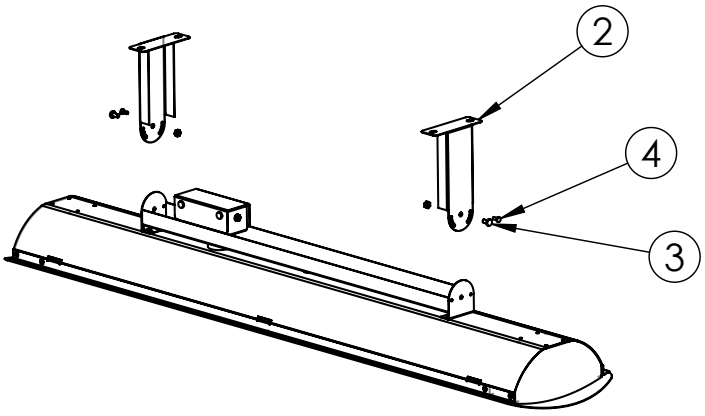
2000W & 4000W Models



3000W & 6000W Models

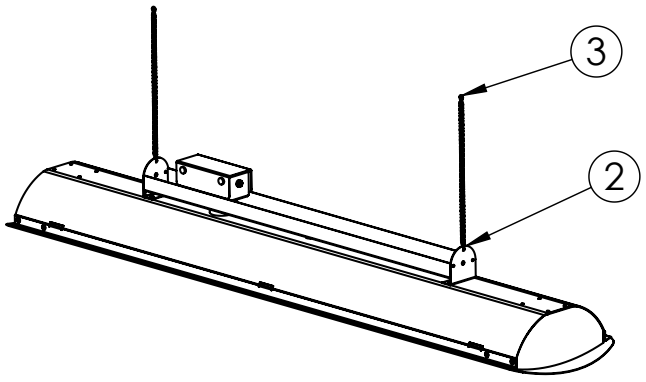


2. Attach mounting brackets to ceiling or wall using appropriate fasteners (Not supplied).
3. Bring heater up to mounting brackets and lock into position with M5x10 screw & nut.
4. Rotate heater to required angle. Lock into position with self tapping screw.
5. Make electrical connection from heater to power supply.



CHAIN SUSPENSION

1. Heater must be installed with heater surface 2400mm above the floor level. If required, cut down length of chain to ensure correct installation height.
2. Attach chains to heater with “S” hooks. Crimp “S” hooks closed after assembly.
3. Prepare ceiling structure for heater. Attach chains to ceiling structure & suspend heater.
4. Make electrical connection from heater to power supply. If required fix suply power cord to ceiling chain with cable ties.

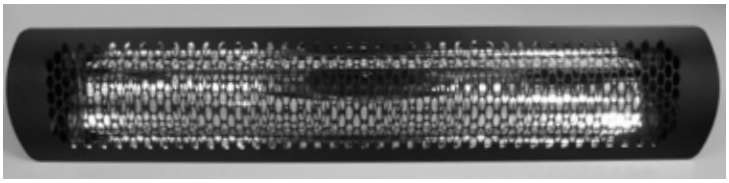


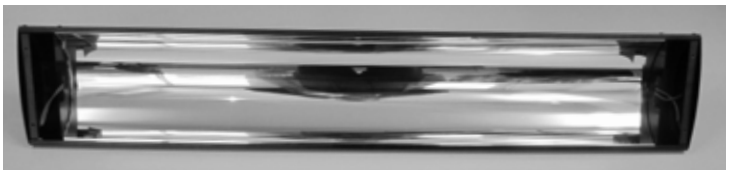
ELEMENT INSTALLATION

⚠ WARNING

This Heater MUST be permanently Installed and hard wired by an authorised/licenced person. Do Not perform maintenance, or carry out installation or assembly procedure while electrical power is switched on.

1. Remove the front cover from the heater.





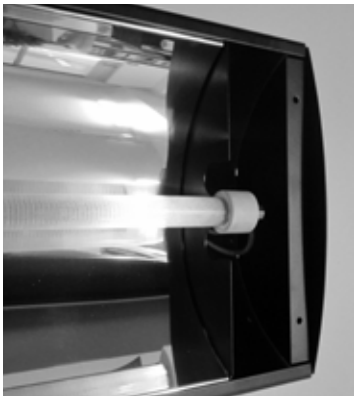
2. Check that ring terminals are crimped securely to cables. 2000W & 3000W models have one cable at each end for assembly of one element. 4000W & 6000W models have two cables at each end for assembly of two elements.

2000W & 3000W Models

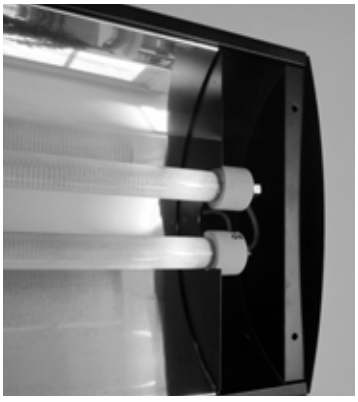
4000W & 6000W Models

3. Fasten elements to cables. Remove outer nut & lock washer from the threaded stud on the element. Assemble ring terminal to the threaded stud & secure with outer nut and lock washer. Use one spanner to hold the inner nut on the element, while fastening the outer nut with a second spanner. Repeat for other end of element.

4. Put elements in the support bracket. For 2000W & 3000W models put element in the centre position. For 4000W & 6000W models put elements in the outside positions.



2000W & 3000W Models

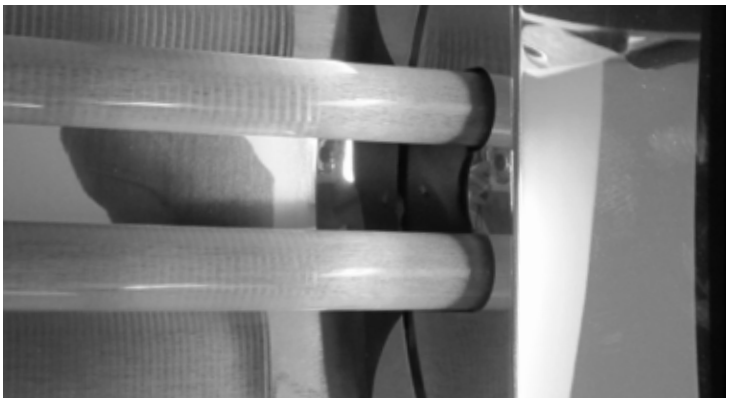


4000W & 6000W Models

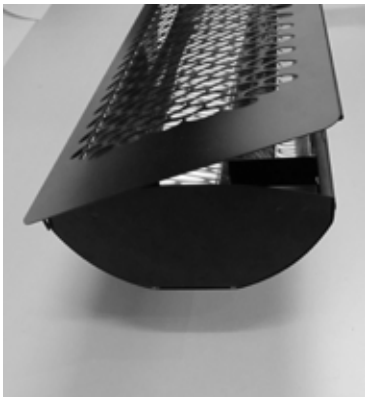
5. Assemble end caps at both ends of the heater with 2 self tapping screws. For 4000W & 6000W models ensure that the middle tab of the end caps are slotted behind the element support bracket.

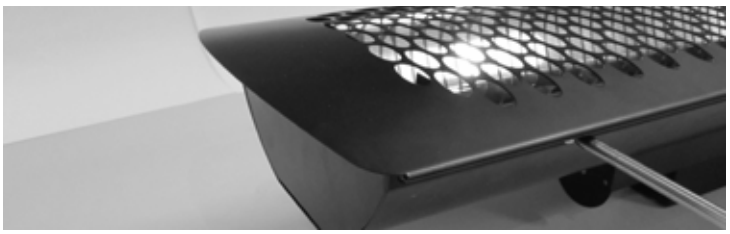
2000W & 3000W Models

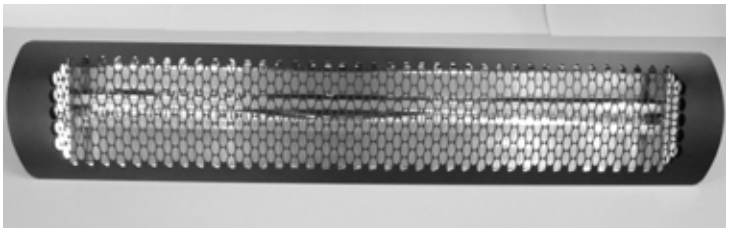
4000W & 6000W Models



6. Assemble front cover onto the heater. Hook front cover to one side of the heater and push other side down. Fasten into position with 3 self tapping screws.







ELECTRICAL INSTALLATION

⚠ WARNING

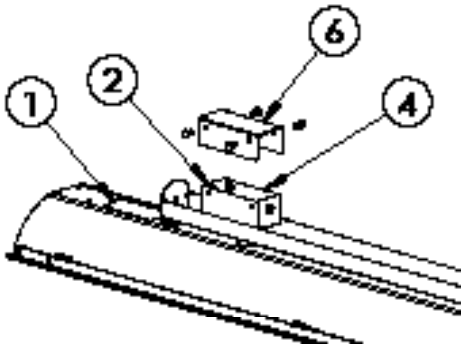
This Heater MUST be permanently Installed and hard wired by an authorised/licenced person. Do Not perform maintenance, or carry out installation or assembly procedure while electrical power is switched on.

⚠ WARNING

ELECTRICAL SHOCK HAZARD! Serious injury or death may occur. Disconnect from electrical supply before installing or servicing this heater. Read and follow installation clearance requirements outlined in this manual. The Appliance MUST be connected to a properly grounded electrical source.

ELECTRICAL INSTALLATION

1. Check product label for correct voltage and wattage - Make sure power source conforms to the heaters requirements.
2. Junction box has a Ø22mm hole to suit M20 or PG13.5 cord grip. Install cord grip with minimum rating of IPX4 to maintain the IPX4 rating of the heater.
3. Use appropriate power supply cables for the heaters' voltage and wattage with minimum temperature rating of 105°C. The fixed wiring must be positioned away from & protected from the enclosure of the heater.
4. Make electrical connections in accordance with local electrical code regulations. For outdoor installation all connections must be made in accordance with local electrical code regulations for outdoor wiring. Only use wiring components approved for outdoor use with minimum IPX4 rating. For 2000W & 3000W models the junction box has one loop of cable. Cut the loop and use the two ends for the active and neutral connections for the element. For 4000W & 6000W models the junction box has two loops of cable. Cut the cable loop marked black and use the two ends for the active & neutral connections for the first element. Cut the unmarked cable loop and use the two ends for the active & neutral connections for the second element. Earth ground wire screw is located in the end of junction box.
5. After installation, the distance between live parts and earth (or earthed metal) should not be less than 2.5 mm. The distance between live and neutral terminal should not be less than 2.0 mm.
6. Assemble the junction box cover & gasket. Ensure that the junction box cover gasket (supplied with unit) is installed to maintain the IPX4 water ingress protection rating of the heater. Failure to install correctly will void the manufacturer's warranty



SERVICING

⚠ WARNING

Servicing and maintenance MUST be carried out by an authorised and licensed person only

⚠ WARNING

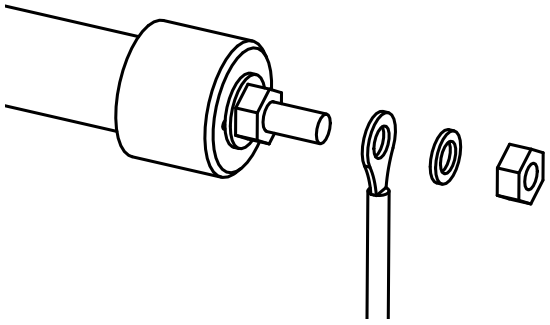
ELECTRICAL SHOCK HAZARD!
Serious injury or death may occur.
Disconnect from electrical supply before servicing this heater.

MAINTENANCE

Electric heaters contain no moving parts and therefore very little maintenance is required other than to ensure that there is no excessive build-up of dirt/dust on the reflectors or element as this can cause overheating and premature element failure. To clean the appliance, ensure heater is not on or has been off for at least 2 hours after operation, and wipe off any dirt/dust with a soft & dry cloth.

TUBE ELEMENT REPLACEMENT

1. Remove Front Cover of the heater by unscrewing the 3 screws holding it in place.
2. Remove first Element End Cover by unscrewing the 2 screws holding it in place.
3. Remove Outer Hex Nut, Lock Washer and Lead Wire Ring Terminal from the threaded stud.
4. Remove second Element End Cover by unscrewing the 2 screws holding it in place.
5. Remove Outer Hex Nut, Lock Washer and Lead Wire Ring Terminal from the threaded stud.
6. Remove old Tube Element.
7. Install new Tube Element by following element installation instructions on page 8 of this manual.



REPLACEMENT PART LIST

No.	Description	2620212 (2000W)	2620213 (3000W)	2620214 (4000W)	2620215 (6000W)
1	Tube Element	2620216	2620217	2620216	2620217
2	Front Cover	2620218	2620219	2620218	2620219
3	Element End Cover Set	2620221	2620221	2620222	2620222
4	Junction Box Cover & Seal Set	2620223	2620223	2620223	2620223
5	Mounting Bracket Set (Short)	2620224	2620224	2620224	2620224
6	Mounting Bracket Set (Long)	2620225	2620225	2620225	2620225

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE (S)	CORRECTIVE ACTION
Element does not energize	1. Defective element 2. Improper connection	1. Replace element 2. Check connection to power outlet
Not enough heat	1. Heater too small for application 2. Heater mounted too high or too far	1. Add additional heater(s) 2. Decrease mounting height or distance
Too much heat	1. Heater too large for application 2. Heater mount too low or too close	1. Replace with smaller heater 2. Increase mounting height or distance
Hot spot in Tube	1. Heater is not level 2. Grease or moisture on tube	1. Adjust to level mount 2. Clear tube-replace if problem persists

BROMIC HEATING

Tungsten Electric Smart-Heating Warranty Conditions

Bromic Pty Limited ('Bromic') warrants to the original purchaser ('the Purchaser') of products supplied by Bromic Heating ('the Goods') that the Goods will be free from defects and/or faults in materials and/or workmanship for Twelve (12) months from the date of Bromic invoice.

Subject to the following conditions of this Warranty, if a defect and/or fault in materials and/or workmanship are found during the warranty period, Bromic will replace or repair the Goods (at its option) without charge.

1. The Goods must have originated from Bromic and must be able to be identified by Bromic personnel as a Bromic Heating product.
2. The original invoice details, including serial number where applicable, MUST be provided to Bromic at the time that any claim is made pursuant to the terms of the Warranty.
3. Any claim made pursuant to the terms of the Warranty must be made within a reasonable time of the discovery of any potential fault or defect.
4. Acceptance of a claim under this Warranty is subject to an assessment of the Goods by Bromic, or its authorised agent, to determine the cause of the defect prior to Bromic's authorisation for repairs to be carried out.
5. Repairs to the Goods must not have been attempted by any person other than an authorised service agent. Repairs attempted by a non authorised agent will void the warranty.
6. Where Goods are located or are to be located in premises where the induction of service or installation personnel is required, any costs for such induction of service or installation agents to gain access to sites is for the account of the customer and not for Bromic.
7. The requirement for repair or replacement of the Goods must not be due to misuse, neglect, accident, improper installation, unauthorised modification or other abuse which in the reasonable opinion of Bromic was occasioned by the purchaser or any agent or employee of the purchaser.
8. Repair or supply of a substitute will not extend or renew the warranty period.
9. Bromic will warrant that any spare parts it provides will be free from defects and/or faults in materials and/or workmanship for a period of 3 months from the date of purchase provided that these spare parts have been installed by a Bromic authorised service agent.
10. Bromic will either undertake the repair or nominate a repair agent authorised by Bromic.
11. Bromic's repair warranty is restricted to normal business hours on Monday to Friday and excluding public holidays and weekends.
12. Where Bromic elects to replace rather than repair the Goods and no identical replacement is available for the Goods being replaced, Bromic may replace the Goods with Goods of a similar standard and design then available from its range.
13. Bromic is not liable for the costs of the authorised service agents other than standard labour costs during normal working hours.
14. Bromic is not liable for travelling time in excess of 50 kilometres from an authorised service agent or 1 hour from the authorised service agent, whichever is the lesser.
15. Bromic is not responsible for any costs involved in gaining access to Goods for the purposes of repairs, checks or modifications.
16. Bromic's warranty does not extend to any damage or induced Goods' failures resulting from an installation that was undertaken outside the direct control of Bromic or its authorised service/installation agents.
17. Bromic is not liable, and will not authorise repairs pursuant to a claim under this Warranty, for Goods which have been modified for rental purposes. (All Goods are designed to be operated indoors in a permanent location. Movement of goods after installation should be restricted to whatever is required for routine cleaning and maintenance only).
18. Bromic will not be responsible or liable for damage or loss caused during transport and/or testing of the Goods and will not be liable for the cost of transport or testing of the Goods.

19. Bromic does not warrant the Goods where the Goods were installed and/or used in conjunction with goods of a supplier other than Bromic ('the other goods') in such a way as to exceed the capacity and/or performance capabilities of the Goods or the other goods and denies all liability for any damage whatsoever suffered by any person arising from such use.

20. Bromic shall not be liable for any indirect or consequential loss, loss of profit or any other economic loss as a result of any actual or alleged failure of the Goods.

21. The obligation of Bromic in relation to the warranty, provided for in the previous paragraphs, is not valid in the following cases:

    a. Installation does not conform to the instructions given in the Use and Maintenance handbook;

    b. Installation in places other than the original place (disassembly and reassembly in another place);

    c. Carelessness, negligence or inability in use or use other than that for which the product is designed and/or dimensioned; or

    d. Modifications or tampering with the product.

23. Bromic is not liable for, and will not authorise repairs pursuant to a claim under this Warranty for:

    a. Damage or failure of Goods as a consequence of not removing packaging and transport materials before use;

    b. Parts subject to wear and tear including but not limited to fuses, batteries, handles, locks, hinges, hoses;

    c. Goods which have not been installed in accordance with Bromic's and/or the manufacturer's specifcation;

    d. Extraordinary and unforeseeable events (voltage surges, irregular electric power supply, natural events and disaster, riots etc);

    e. Repairs or replacement of Goods not bearing original serial numbers (where applicable) or compliance plates;

    f. Rust and/or discoloration due to heat or exposure to corrosive environments;

    g. Damage caused to Goods due to improper use of cleaning agents, detergents, bleaches or other chemical additives or agents of a corrosive nature;

    h. Breakage, either intentional or unintentional, to any part of the Goods;

    i. Any damage arising from any modification of the Goods that has taken place without prior authorisation from Bromic;

    j. Any use of the Goods for any reason other than its originally specified purpose;

    k. Installation of Goods in places other than the original place (disassembly and reassembly in another place);

    l. Carelessness, negligence or use other than that for which the Goods are designed;

    m. Goods not performing correctly as a result of Goods being used in an environment whereby the ambient temperature and relative humidity are outside the operating parameters specified for those particular goods;

    n. Modifications or tampering with the Goods; or

    o. Heater Failure of the Goods due to;

        i. Incorrect installation of electricty supply;

        ii. Insufficient regular maintenance (of the type specified by the relevant manufacturer) of components.

        iii. Failure to provide adequate ventilation for the Goods as specified by the manufacturer; or

        iv. Fair wear and tear of the Goods;

24. Please contact Bromic as soon as possible after discovery of a potential defect and/or fault with the Goods to arrange for it to be tested and/or serviced.

25. All warranty enquiries and/or claims should be directed to Bromic's Head Office via its postal address - P0 Box 6062 Silverwater NSW 1811 or by telephoning 1300 276 642 (within Australia) or sending a fax to +61 2 9748 4289.

26. The manufacturer is not responsible for assuring compliance with jurisdictional codes and regulations governing sales, construction, installation and/or use of the heating products and cannot be responsible for how the product is installed or used. Before purchase and use of the product, it is the responsibility of the owner to review the product application and all applicable national and local codes and regulations governing the installation and use of such heating products and to seek advice from relevant technical persons.
27. In addition to the above, all of Bromic's other general terms and conditions of trade apply, save for those which are inconsistent with the terms of this warranty. These general terms and conditions of trade can be obtained on request from Bromic.
28. In addition to the Warranty extended by Bromic to the Purchaser, the Australian Consumer Law requires that Bromic provide the following additional guarantees to consumers (as that word is defined by the Competition and Consumer Act) in respect of consumer goods (as defined by that Act) supplied in Australia.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

For more information visit our website at www.bromicheating.com or call 1300 276 642.

Head Office: P0 Box 6062 Silverwater, Sydney, NSW 1811 Australia.

WARRANTY REGISTRATION PROCEDURE

Any claim under this warranty should be initiated with the ***dealer/retailer*** who sold the Goods, or with any other dealer handling Bromic's products.

To register your product please fill out your the registration form at http://www.bromicheating.com/warranty

Please ensure you have the following information during this process;

Serial Number of Heater: _____